

AMENDMENTS TO THE CLAIMS

1-24. (Cancelled)

25. (New) A cleaning device comprising:

a board having an edge portion;

a brush that contacts the edge portion of said board and removes dust attached to the edge portion;

an ion injection device for directing an ionized gas toward the brush; and

a discharge device for absorbing and removing the ionized gas directed toward said brush from the ion injection device.

26. (New) The cleaning device according to claim 25, wherein said discharge device is provided with a discharge portion for discharging the gas.

27. (New) The cleaning device according to claim 26, further comprising a nozzle member structured to emit compressed air directed toward the discharge device.

28. (New) The cleaning device according to claim 26, comprising a cleaning case having an opening portion for said board, wherein said discharge device is provided with a receiving member which is provided in opposition to said opening portion at the undersurface side of said cleaning case.

29. (New) The cleaning device of the board according to claim 25, comprising a brush positioning device capable of adjusting the position of said brush in a direction in and out of contact with said board.

30. (New) The cleaning device according to claim 25, wherein the brush includes conductive fibers.

31. (New) The cleaning device according to claim 25, wherein the board is allowed to ingress along its edge portion, so that the edge portion of said board is cleaned by said brush, further wherein the ionized gas is positioned in a direction that is reverse to the ingress direction of said board.

32. (New) A cleaning device for cleaning the edge portion of a board in which terminals are formed, comprising:

a stationary brush for brushing the edge portion of said board and removing the dust attached to the edge portion.

33. (New) A method of cleaning an electronic device, comprising the steps of:

providing a board having an edge portion;

brushing the edge portion of said board and removing dust attached to the edge portion;

injecting an ionized gas toward the brush; and

absorbing and removing the gas injected toward said brush.

34. (New) The cleaning method according to claim 33, further comprising the step of directing an non-ionized gas towards the brush.

35. (New) A cleaning device for cleaning a device in which terminals are formed, comprising:

a board including an edge portion;

a brush having brush hair that includes conductive fiber, the brush hair for brushing a portion of said board and removing dust attached to the edge portion; and

a discharge device for discharging the dust removed by said brush.

36. (New) The cleaning device according to claim 35, comprising a brush positioning device capable of adjusting the position of said brush in a direction in and out of contact with said board.

37. (New) The cleaning device according to claim 35, wherein the brush includes hair, further where the hair is positioned around a roller.

38. (New) The cleaning device according to claim 35, further including a nozzle member having an oblong injection orifice along a surface of the board.

39. (New) The cleaning device according to claim 25, wherein the board is allowed to ingress along its edge portion, so that the edge portion of said board is cleaned by said brush, further wherein ionized gas is positioned in a direction that is reverse to the ingress direction of said board.

40. (New) A mounting apparatus for mounting electronic parts comprising:

a part conveying device in which a plurality of part holding portions are integrally provided along a peripheral direction at a predetermined interval, wherein the plurality of part holding portions are intermittently driven in a peripheral direction;

a part supply portion for supplying an electronic part to each part holding portion of said part conveying device intermittently driven; and

an inspection device for inspecting whether or not dust is attached to the electronic parts supplied and held by said part holding portion at a position where said part holding portion stops by the intermittent driving of said part conveying device.

41. (New) The mounting apparatus according to claim 40, further comprising a control device for collecting data from the inspection device and making a determination which parts meet a predetermined quality standard.

42. (New) Mounting equipment for mounting electronic parts on an edge portion of a board in which terminals are formed, comprising:

a part conveying device in which a plurality of part holding portions are integrally provided along a peripheral direction at predetermined intervals and these part holding portions are intermittently driven in a peripheral direction;

a part supplying portion for supplying said electronic parts successively to each part holding portion of said part conveying device intermittently driven;

a brush having brush hair that includes conductive fiber, the brush for removing dust attached to the electronic parts by the brush hair brushing connection regions with said terminals of said electronic parts at a stage prior to mounting said electronic parts supplied and held by said part holding portion on the edge portion of said board; and

a discharge device for discharging the dust removed by said brush.

43. (New) Mounting equipment of mounting electronic parts on an edge portion of a board in which terminals are formed, comprising:

a part conveying device in which a plurality of part holding portions are integrally provided along a peripheral direction at predetermined intervals and these part holding portions are intermittently driven in the peripheral direction;

a part supplying portion for supplying said electronic parts successively to each part holding portion of said part conveying device intermittently driven;

a brush capable of removing the dust attached to the electronic parts by brushing the connection regions with said terminals of said electronic parts at a stage prior to mounting said electronic parts supplied and held by said part holding portion on the edge portion of said board;

an ion injection device for injecting an ionized gas toward the portion to contact at least the connection regions of said electronic parts of the brush; and

a discharge device for discharging the gas injected from the ion injection means toward said brush.

44. (New) The mounting equipment of the electronic parts according to claim 43, comprising a brush positioning device capable of adjusting the position of said brush in a direction in and out of contact with said electronic parts.

45. (New) The mounting equipment of the electronic parts according to claim 44, wherein a brush position detecting device capable of detecting the top end position of the brush hair is detachably attachably provided, and wherein the brush position detecting device comprises a pressure sensor capable of detecting the abutting of the top end of the brush hair against the sensor.

46. (New) The cleaning device according to claim 25, wherein the board is allowed to ingress along its edge portion, so that the edge portion of said board is cleaned by said brush, further wherein the ionized gas is positioned in a direction that is reverse to the ingress direction of said board.